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Process for multilayer lacquering

Description of Technology: The invention relates to a process for multilayer lacquering of various substrates, in which e.g. a film of primer, optionally a film of filler with a surface lacquer or a lacquer film consisting of a base coat and after flash-off, drying or stoving, a film of clear lacquer is applied, optionally with stoving after further flash-off. The process is suitable e.g. for lacquering in the automobile industry.

Patent Listing:

1. **US Patent No. 5,395,659,** March 7, 1995, **"**Process for multilayer lacquering"

http://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO2&Sect2=HITOFF&p=1&u=%2Fnetahtml%2FPTO%2Fsearch-bool.html&r=1&f=G&l=50&co1=AND&d=PTXT&s1=5,399,383.PN.&OS=PN/5,399,383&RS=PN/5,399,383

Market Potential: The process according to the invention using surface or clear lacquers with cationic binding agents may be used generally with any type of lacquering. The process is for instance suitable for industrial production lacquering, particularly in the automobile industry or for lacquering equipment such as domestic appliances. The process according to the invention may however be applied also for repair lacquering, e.g. in the automobile industry.

If use is made of two-component clear lacquers, e.g. with a view to carrying out repairs on automobiles, curing may also be effected at room temperature. With a view to producing the base coat film, both base coats dissolved in conventional manner in organic solvents and aqueous anionic or cationic base coats may be used. In practice the aqueous base coat films are today coated with non-aqueous clear lacquers, which however give off large amounts of solvent to the ambient air. It is the object of the invention to provide a lacquer system for producing outermost lacquer films e.g. a top coat lacquer (surface lacquer) or clear lacquer system suitable in practice for producing multilayer configurations without giving rise to environmental problems.

Fraunhofer Institute Co., a German based company, works with automotive dealers such as Daimler Chrysler and BMW, and they provide their adhesive bonding technology and lacquering. They recently brought operations to the US and are instructing workers on how to use their technology. The Big Three U.S. automakers, DaimlerChrysler, Ford Motor Co. and General Motors Corp., use plastic car parts that are painted.

Benefits:

- Produces multilayer configurations without causing environmental problems.

Applications:

- Lacquering in the automobile industry without harming the environment.
- Domestic appliances.

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